

S
622.34
E31ymf
1996
Maxim
Technologies, Inc
Hazardous mine
opening project,
York Mining
District-phase II,
project no. DEQ-

FINAL REPORT

**HAZARDOUS MINE OPENING PROJECT
YORK MINING DISTRICT - PHASE II
PROJECT NO. DEQ-AMRB 94-005**

STATE DOCUMENTS COLLECTION

10 10 1996

MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620

MAXIM
TECHNOLOGIES INC



MONTANA STATE LIBRARY



3 0864 0014 4939 9

FINAL REPORT

HAZARDOUS MINE OPENING PROJECT
YORK MINING DISTRICT - PHASE II
PROJECT NO. DEQ-AMRB 94-005



Digitized by the Internet Archive
in 2014

<https://archive.org/details/hazardousmineope1996maxi>

FINAL REPORT

HAZARDOUS MINE OPENING PROJECT
YORK MINING DISTRICT – PHASE II
PROJECT NO. DEQ-AMRB 94-005

Prepared for:

Montana Department of Environmental Quality
Reclamation Division
Abandoned Mine Reclamation Bureau

Prepared by:

Maxim Technologies, Inc.
P.O. Box 4699
1610 B Street
Helena, Montana 59604

April 1996

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
1.1 PROJECT LOCATION	1
1.2 SITE DESCRIPTION	1
1.3 PROJECT OBJECTIVES	1
2.0 PROJECT PLANNING AND CONSTRUCTION	3
3.0 CHRONOLOGICAL LISTING OF EVENTS	3
3.1 PREBID CONFERENCE	3
3.2 PROJECT BIDS	4
3.3 PROJECT CHRONOLOGY	4
4.0 PROJECT CONSTRUCTION	5
4.1 DESCRIPTION OF PROJECT PLAN	5
4.2 CONTRACTOR'S OPERATION	5
5.0 PROJECT COSTS	6
5.1 PAYMENT REQUESTS	6
5.2 PROJECT QUANTITIES AND COSTS	6
5.3 COST ANALYSIS	7
6.0 PROJECT SUMMARY	9
6.1 PROJECT RECONCILIATION	9
6.2 SITE CONDITIONS AFTER COMPLETION	9
6.3 MONITORING AND MAINTENANCE	9
6.4 PHOTOGRAPHIC RECORD	9

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 LOCATION MAP	2
2 SITE MAP	Appendix A
3 BROWN'S GULCH AREA	Appendix A
4 BROWN'S GULCH - AS BUILT	Appendix A

LIST OF TABLES

<u>Table</u>	
5-1	PAYMENT REQUEST SUMMARY 6
5-2	SUMMARY OF PROJECT QUANTITIES AND COST 7
5-3	COST ANALYSIS 8
6-1	PROJECT RECONCILIATION SUMMARY Appendix E

LIST OF APPENDICES

<u>Appendix</u>	
A	SITE MAPS AND AS BUILT DRAWING (BROWN'S GULCH SITES)
B	BID TABULATIONS
C	CHANGE ORDERS AND WORK DIRECTIVE CHANGES
D	APPROVED PAYMENT REQUESTS, CERTIFICATES OF COMPLETION AND ACCEPTANCE, AND AFFIDAVIT ON BEHALF OF CONTRACTOR
E	PROJECT RECONCILIATION
F	PHOTOGRAPHIC RECORD

1.0 INTRODUCTION

Hard rock mining has taken place in Montana since 1862 and was essentially unregulated from a reclamation standpoint for over one hundred years. As a result, thousands of unsecured shafts and adits are located in mining districts throughout the state. The purpose of the Hazardous Mine Opening (HMO) Project in the York Mining District was to abate some of the hazards associated with mine openings. This project was one of a continuing series of hazardous mine opening closure projects completed by the Montana Abandoned Mine Reclamation Bureau (AMRB).

1.1 PROJECT LOCATION

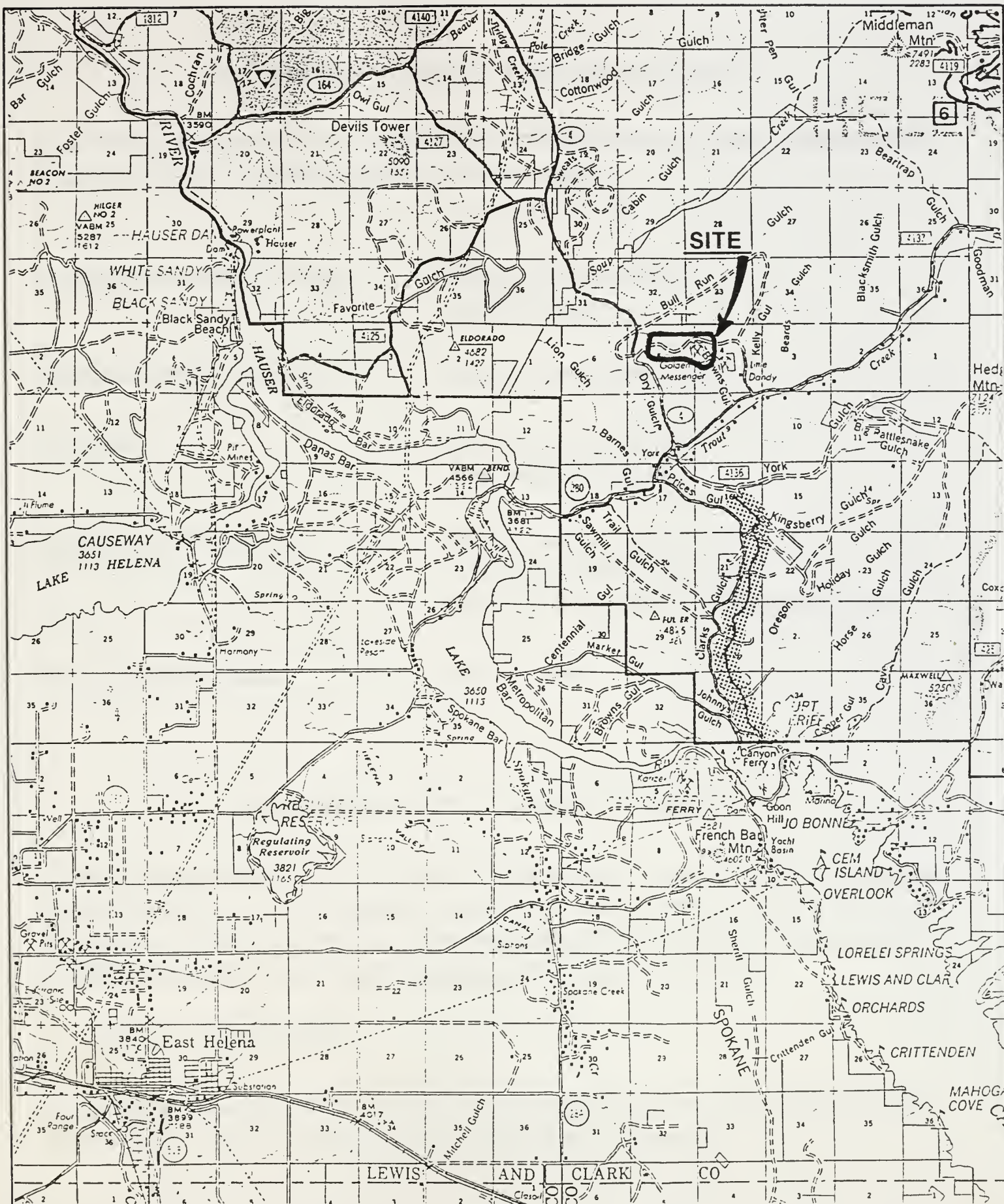
The hazardous mine openings included in this project are located in the York Mining District, Lewis and Clark County, Montana. The district is located in the Belt Mountains approximately 25 miles northeast of Helena, Montana near the small town of York (Figure 1). The York Mining District - Phase II Project included backfill closure of ninety-three (93) mine openings at 56 sites.

1.2 SITE DESCRIPTION

The sites included in the York Mining District - Phase II Project are located in or near residential or recreational areas, within historic areas, or close to public roads. All mine openings included in this project are considered hazardous to public safety. The shafts involved were deep enough to prevent unaided escape upon entry. Adits were accessible to the curious, exposing dangerous underground workings and unknown hazards.

1.3 PROJECT OBJECTIVES

The York Mining District - Phase II Project was designed and executed with the intent of eliminating accidental or unauthorized entry to mine openings that exposed unknown hazards at a number of abandoned hard rock mines. Sites were nominated for inclusion into the project based on the AMRB's non-coal inventory, a follow-up field inventory, and landowner consent. Work included in this project involved backfill closure of mine openings, prospect pits, or subsidence features; hand sealing adits; and, construction of four mounded earth road barriers (kelly humps).



From Helena National Forest Map

Location Map
York Phase II
Lewis and Clark County, Montana
FIGURE 1

2.0 PROJECT PLANNING AND CONSTRUCTION

The following people/firms have contributed to the coordination, design, execution, and inspection of the York Mining District - Phase II Project:

Project Coordination & Design:	Maxim Technologies, Inc. Helena, Montana
Engineering Plan Preparation:	Maxim Technologies, Inc.
Contractor:	Scott Construction Inc. East Helena, Montana
Quality Control Inspection:	Maxim Technologies, Inc. Ed Johnson, Project Inspector Jeremiah B. Bowser, P.E., Project Engineer
AMRB Project Manager:	Dale Herbort

3.0 CHRONOLOGICAL LISTING OF EVENTS

Construction activities related to the York Mining District - Phase II Project commenced on July 10, 1995 and were completed on August 18, 1995. The contractor performed all construction activities according to contract specifications and within the contract period. The following section describes the sequence of events for the project.

3.1 PRE-BID CONFERENCE

A pre-bid conference and site showing was held on Friday, May 19, 1995 at the York Mining District. Twelve potential bidders attended the conference.

3.2 PROJECT BIDS

Montana Department of State Lands personnel publicly opened bids for the Hazardous Mine Opening Project York Mining District - Phase II on May 25, 1995. The three lowest bids are presented below. Complete bid tabulation results are presented in Appendix B.

♦	Scott Construction, Inc.	\$ 57,139.25
♦	Coleman Construction	\$ 59,194.00
♦	Baxter Construction	\$ 59,408.64

3.3 PROJECT CHRONOLOGY

The York Mining District - Phase II Project was completed during the summer of 1995. The following chronology presents the sequence of events that led to completion of the project.

Notice of Award:	June 29, 1995
Notice to Proceed:	July 10, 1995
Construction Start-up:	July 10, 1995
Certificate of Completion:	April 15, 1996
Final Inspection:	August 18, 1995
Final Acceptance:	September 3, 1993

4.0 PROJECT CONSTRUCTION

4.1 DESCRIPTION OF PROJECT PLAN

The 93 mine openings included in this project were closed by a variety of means. The majority of the sites were closed using excavation equipment by backfilling the openings with waste rock available near the site of the opening. Twelve sites were located in an area referred to as Brown's Gulch. These sites were generally large subsidence features that required considerable clearing, grubbing, and backfilling. Several openings were closed using hand labor methods. All sites were seeded, fertilized, and mulched in accordance with contract specifications. Site locations and as-built drawings (Brown's Gulch Sites) are presented in Appendix A.

4.2 CONTRACTOR'S OPERATION

Scott Construction performed the work utilizing a crew of four full-time personnel supplemented by part-time laborers during the construction phase of the project. Lee Scott was the field superintendent. Two equipment operators and one laborer were utilized during the construction project. The Contractor used the following equipment:

- CAT 931 Track Loader
- D-6 Caterpillar Dozer
- Caterpillar 235 Excavator
- One Ton Four-Wheel Drive Flatbed Truck
- 2 1/2 Ton Stake Truck

The Contractor began work in the Brown's Gulch area on July 10, 1995. Clearing and grubbing involving primarily tree removal on 1.5 acres was accomplished prior to backfilling twelve mine openings and subsidence features. Initial surveys estimated approximately 8,190 cubic yards of material were necessary to adequately close the Brown's Gulch openings. Actual quantities, as determined by survey, showed that 5,947 cubic yards of material were actually used for backfill closure in the Brown's Gulch area. Seeding, fertilizing and mulching of each site was performed upon completion of final grading and seedbed preparation. Wood chips made from trees removed prior to backfilling were spread over disturbed areas as part of seedbed preparation.

Installation of two adit seals on July 15, 1995 completed operations in the Brown's Gulch area. The Contractor proceeded to backfill prospect pits, adits, shafts and trenches at the remainder of the sites included in the project. Each mine opening was seeded, fertilized, and mulched upon completion of backfilling and final grading.

5.0 PROJECT COSTS

5.1 PAYMENT REQUESTS

The total contract cost for the York Mining District - Phase II was \$47,310.58. One change order was written for the project (Appendix C). The original bid price was \$57,139.25 compared to the engineers' estimate of \$74,185.00. The primary difference between the original bid price and the contract total was the amount of backfill material used in the closure of mine openings in the Brown's Gulch area. Table 5-1 summarizes the approved payment requests issued for the project. Appendix D contains copies of the pay requests, the Certificate of Completion and Acceptance, and the Affidavit on Behalf of Contractor.

TABLE 5-1

PAYMENT REQUEST SUMMARY YORK MINING DISTRICT - PHASE II

PAYMENT REQUEST NO.	DATE	AMOUNT
1	8-18-95	\$ 50,702.67
2	3-6-96	\$ <3,392.09>
Total Contract Amount		\$ 47,310.58

5.2 PROJECT QUANTITIES AND COSTS

Table 5-2 contains a summary of project quantities and costs associated with each method of closure and the unit cost of each method or structure constructed.

TABLE 5-2

**SUMMARY OF PROJECT QUANTITIES AND COSTS
YORK MINING DISTRICT - PHASE II**

Closure Method	Unit	Quantity	Unit Cost	Total Cost
Mobilization	LS	1.0	\$ 2,500.00	\$ 2,500.00
Clearing and Grubbing	AC	1.5	\$ 475.00	\$ 712.50
Mine Closure	CY	9,368	\$ 4.25	\$ 39,814.00
Adit Seal	EA	2	\$ 350.00	\$ 700.00
Mounded Earth Road Barriers (kelly humps)	EA	4	\$ 175.00	\$ 700.00
Seed, Fert., & Mulch	AC	2.99	\$ 795.00	\$ 2,377.05
SubTotal				\$ 46,803.55
Allowance for Contractor's Tax Paid				\$ 507.03
TOTAL COST				\$ 47,310.58

Note: LS = Lump Sum; AC = Acre; CY = Cubic Yard; EA = Each

5.3 COST ANALYSIS

Table 5-3 presents a cost analysis of project costs. Along with construction costs, this summary includes engineering costs such as site inventory, preparation of construction specifications, site survey, preparation of bid package and contract documents, construction inspection, contract administration, and preparation of a final report.

TABLE 5-3**COST ANALYSIS
YORK MINING DISTRICT – PHASE II****ENGINEERING**

Closure Design, Bid Package Preparation, and Survey	\$ 10,043.37
Construction Inspection, Administration, and Final Report Preparation	\$ 11,331.68

TOTAL ENGINEERING FEE	\$ 21,375.05
------------------------------	---------------------

TOTAL CONSTRUCTION COST	\$ 47,310.58
--------------------------------	---------------------

TOTAL PROJECT COST	\$ 68,685.63
---------------------------	---------------------

Total Engineering Fee/Total Project Cost	31.1%
--	-------

Total Construction Cost/Total Project Cost	68.9%
--	-------

Construction Inspection Cost/Total Construction Cost	24.0%
--	-------

Engineering Design and Bid Package Preparation/Total Construction Cost	7.1%
--	------

Total Number of Mine Openings Inventoried	114
---	-----

Total Number of Mine Openings Closed	93
--------------------------------------	----

AVERAGE CONSTRUCTION CLOSURE COST PER MINE OPENING	\$ 508.72
---	------------------

6.0 PROJECT SUMMARY

6.1 PROJECT RECONCILIATION

Table 6-1 summarizes the differences between the reclamation closures specified in the contract bid document and those actually constructed. Table 6-1 is located in Appendix E and contains a listing of all the work specified in the contract documents reconciled with the work actually constructed at each site.

6.2 SITE CONDITIONS AFTER COMPLETION

Dale Herbort, the AMRB Project Coordinator, and Ed Johnson, Maxim's project inspector, performed a final inspection of the project on August 18, 1995. The closures completed during the project were constructed in general accordance with specifications contained in the Standard Construction Specifications for Abandoned Mine Reclamation and the bid document for the project.

6.3 MONITORING AND MAINTENANCE

Periodic monitoring for subsidence at sites backfilled during the project should be conducted to ensure adequacy of the fill. To minimize any liability to the State, all backfilled mine openings should be inspected on an annual basis for several years following completion of the project.

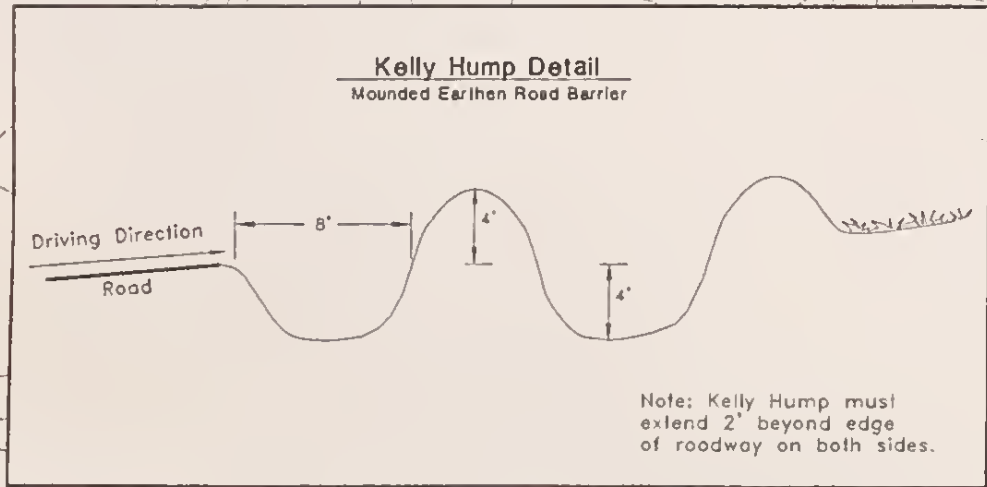
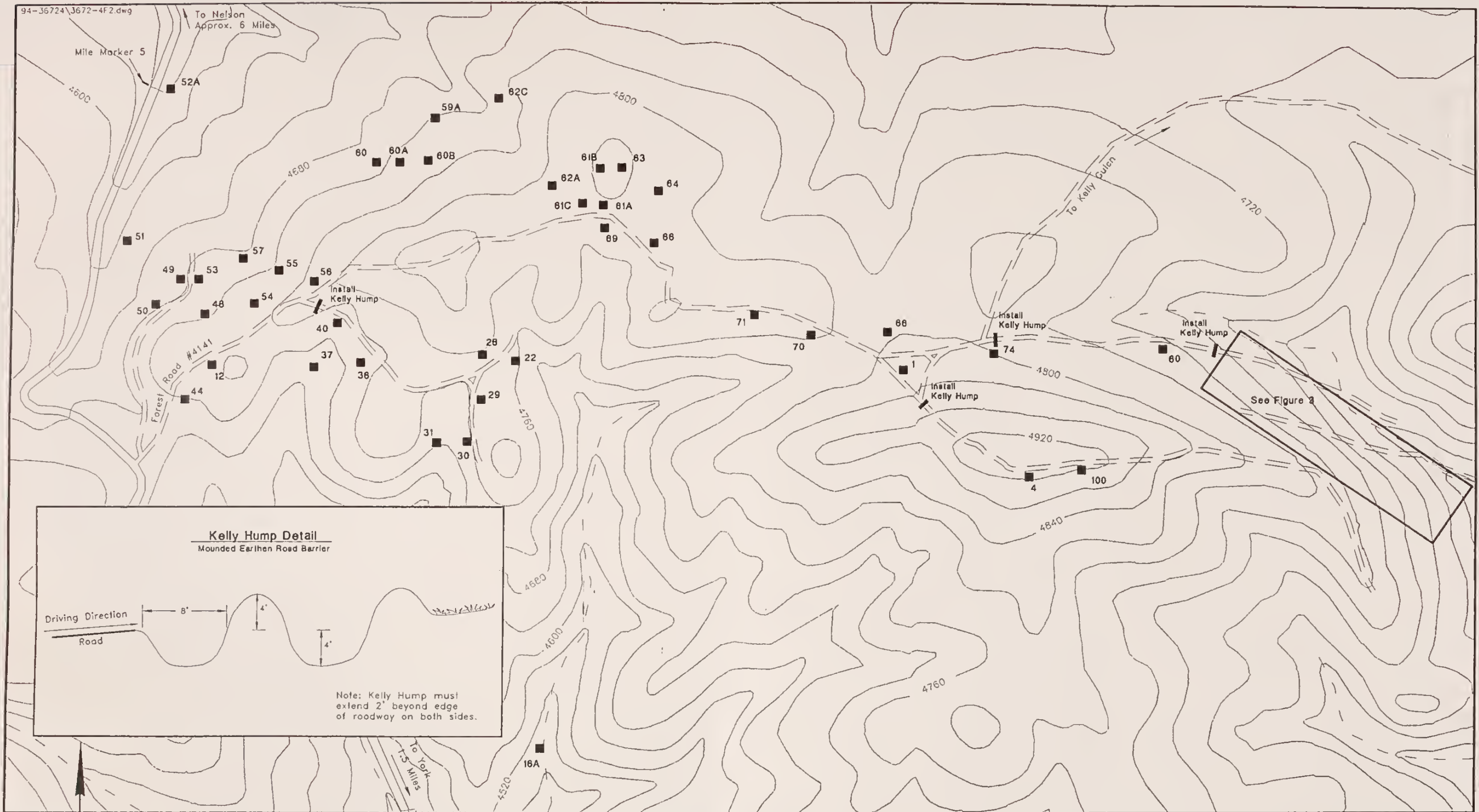
Revegetation success should be monitored for several years. Vegetation inspections should identify seeding failures on reclaimed sites and document species which are better suited to revegetate reclaimed sites. The presence or absence of weeds should also be documented to satisfy weed control obligations.

6.4 PHOTOGRAPHIC RECORD

Print and slide photographs were taken of selected representative project mine openings before and after construction activities were completed. The photographic record also contains prints and slide photographs of work completed during closure. This photographic record is contained in Appendix G. The photographs are indexed by Problem Area (PA) numbers; a description of the photo can be found in the log presented at the beginning of Appendix G.

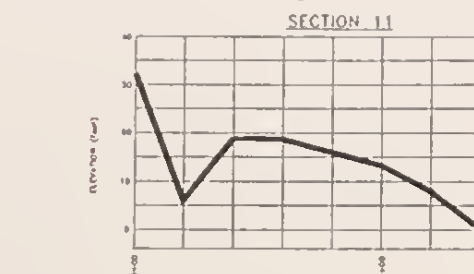
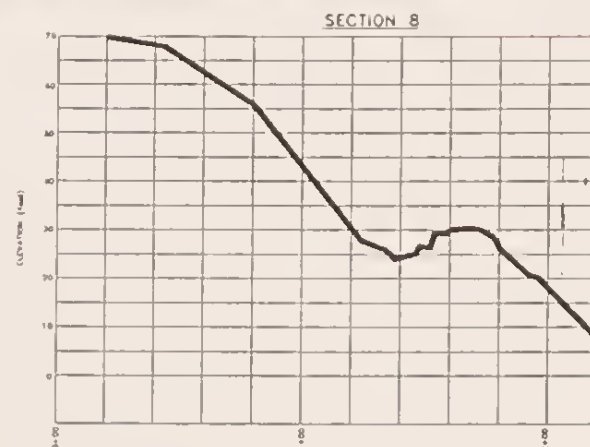
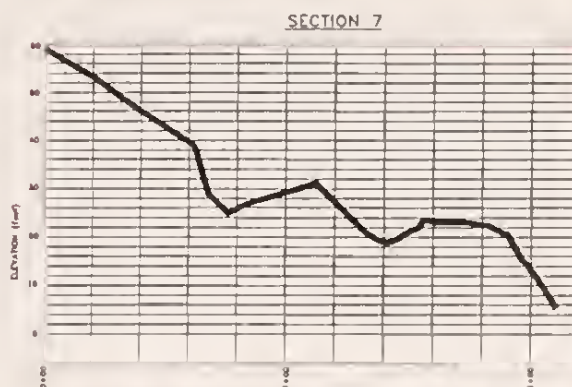
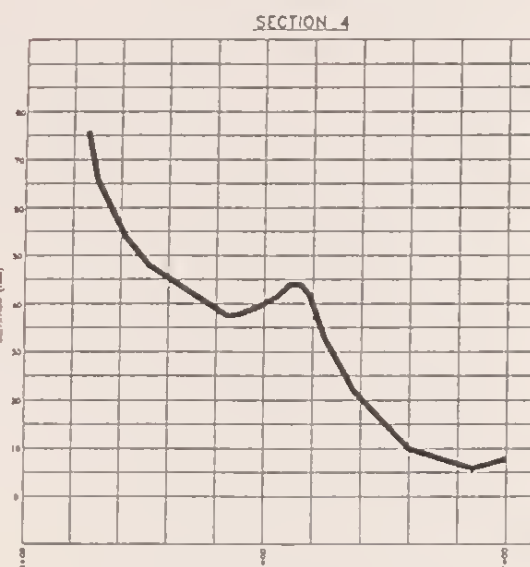
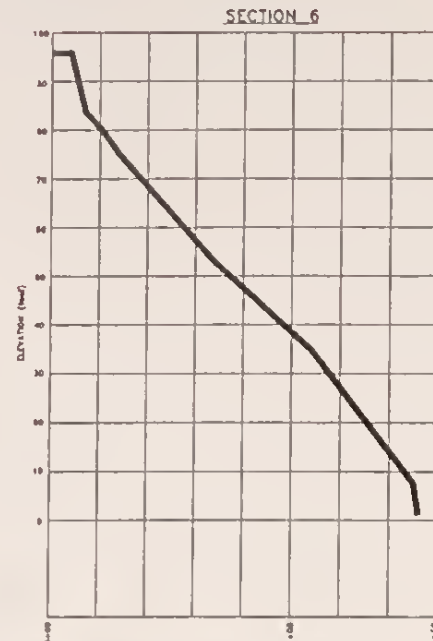
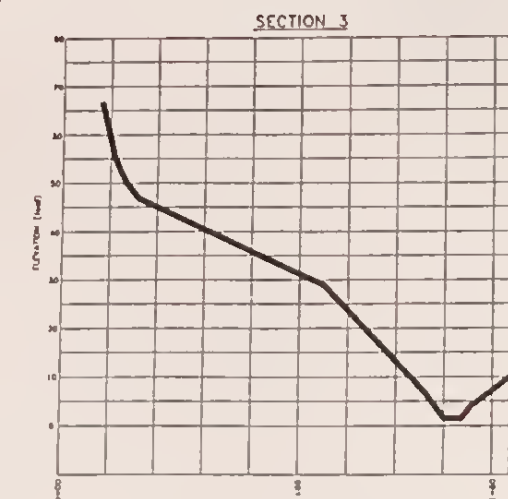
APPENDIX A

SITE MAPS AND AS BUILT DRAWING (BROWN'S GULCH SITES) YORK MINING DISTRICT – PHASE II

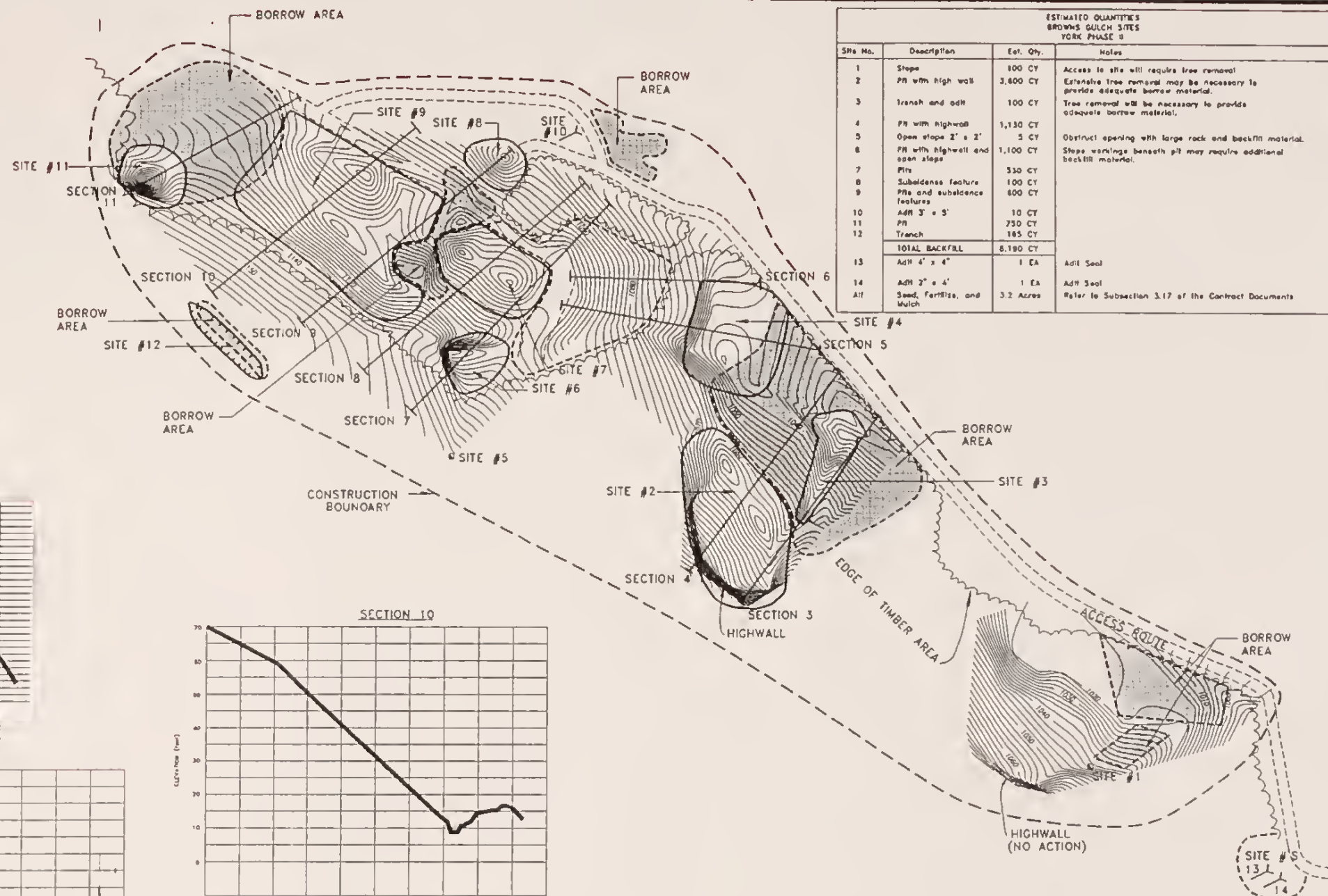
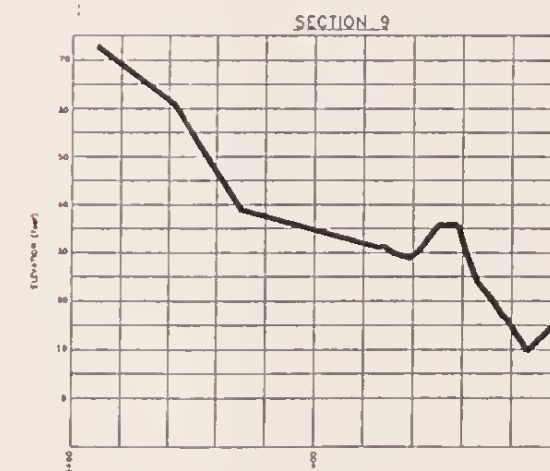
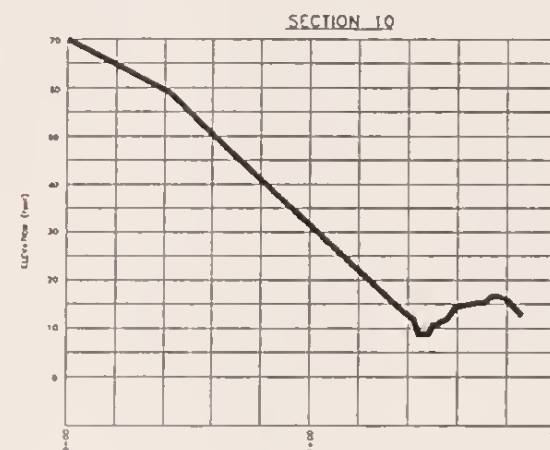


31 ■ Mine Opening Number

Site Map
York Phase II
Lewis and Clark County, Montana
FIGURE 2



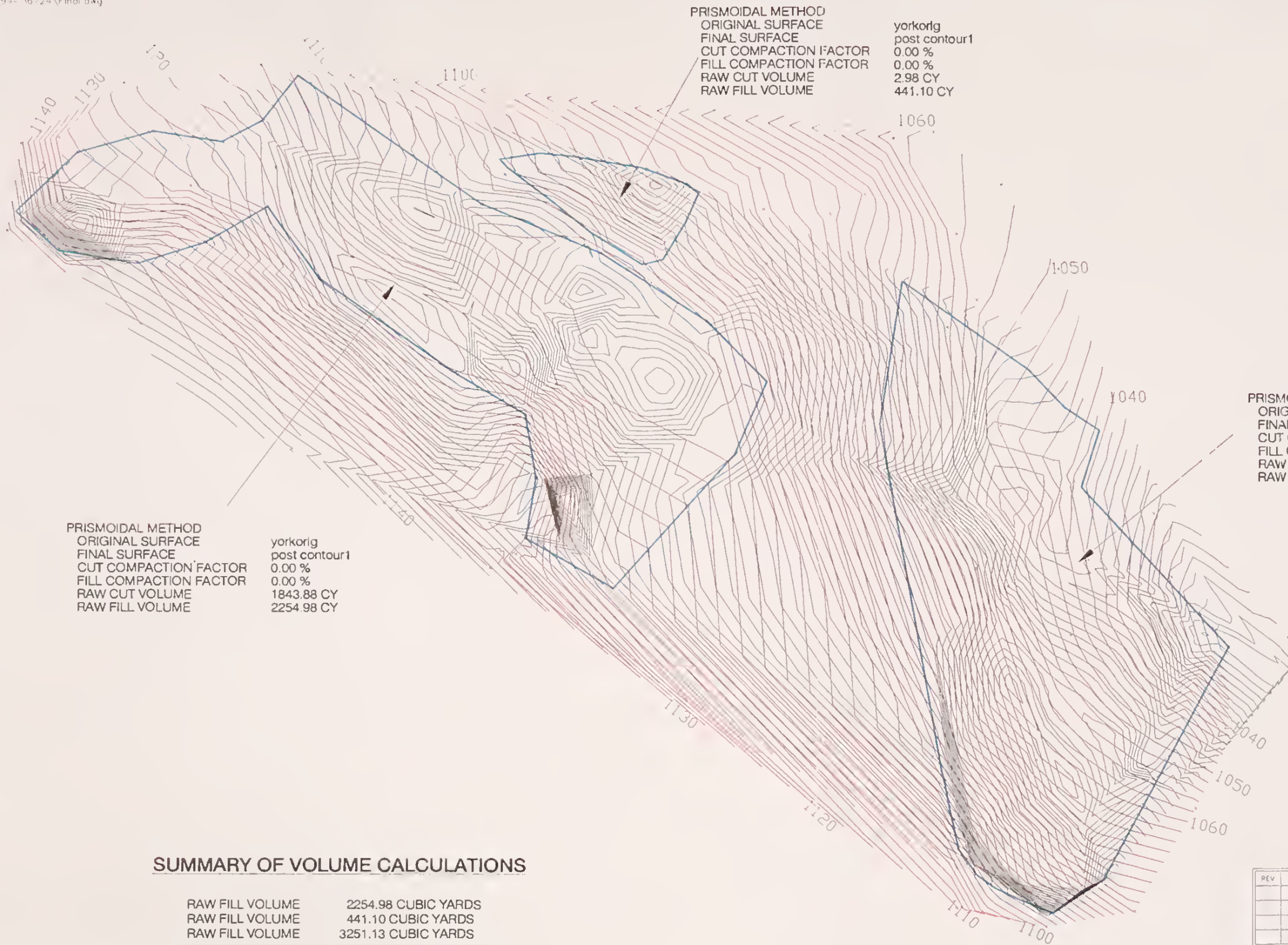
SECTION PROFILES
HORIZONTAL: 1"=80 feet
VERTICAL: 1"=40 feet



ESTIMATED QUANTITIES BROWN'S GULCH SITES YORK PHASE II			
Site No.	Description	Est. Qty.	Notes
1	Slope	100 CY	Access to site will require tree removal
2	PR with high wall	3,600 CY	Extensive tree removal may be necessary to provide adequate borrow material.
3	Trench and adH	100 CY	Tree removal will be necessary to provide adequate borrow material.
4	PR with highwall	1,130 CY	Obstruct opening with large rock and backfill material.
5	Open slope 2' x 2'	5 CY	
6	PR with highwall and open slope	1,100 CY	Slope workings beneath pit may require additional backfill material.
7	Pits	530 CY	
8	Subsidence feature	100 CY	
9	PRs and subsidence features	600 CY	
10	AdH 3' x 5'	10 CY	
11	PR	750 CY	
12	Trench	185 CY	
TOTAL BACKFILL		8,190 CY	
13	AdH 4' x 4'	1 EA	AdH Seal
14	AdH 2' x 4'	1 EA	AdH Seal
Alt	Seed, Fertilizer, and Mulch	3.2 Acres	Refer to Subsection 3.17 of the Contract Documents

REV	DATE	DESCRIPTION	DRN BY	APP BY
1	4/95	Revise notes.		

Date: October 28, 1994	Drawn By: Figure 3
Project #: 94-3672-4	York Phase II
Drawn By: Saurer, Huntington	
Sheet: 3 of 3	Project Title: Brown's Gulch Sites
Huntingdon	



KEY

- Pre-reclamation contours
- Post-reclamation contours
- Outline of volume calculation areas



SUMMARY OF VOLUME CALCULATIONS

RAW FILL VOLUME	2254.98 CUBIC YARDS
RAW FILL VOLUME	441.10 CUBIC YARDS
RAW FILL VOLUME	3251.13 CUBIC YARDS
TOTAL RAW FILL VOLUME	5947.21 CUBIC YARDS

REV	DATE	DESCRIPTION	DRN BY	APP BY

Date: January 1998	Project Title: Abandoned Mine Reclamation Program
Project #: 830-53	
File: g:\94-36724\Final.dwg	
Sheet: 1 of 1	
MAXIM TECHNOLOGIES INC	York AMR Volume Survey FIGURE 4

APPENDIX B

**BID TABULATIONS
YORK MINING DISTRICT – PHASE II**

HAZARDOUS MINE OPENING MAINTENANCE PROJECT
YORK MINING DISTRICT - PHASE II - LEWIS & CLARK COUNTIES, MONTANA

DSL/AMRB 94-005
May 25, 1995

BID TABULATIONS				ENGINEER'S ESTIMATE		SCOTT CONSTRUCTION		COLEMAN CONSTRUCTION		BAXTER CONSTRUCTION	
Item Number	Estimated Quantity	Unit	Description	Unit Price	Total Price						
1.	1	LS	Mobilization, Bonding and Insurance	.00	0.00	2500.00	2,500.00	3000.00	3,000.00	5900.00	5,900.00
2.	1.5	AC	Clearing and Grubbing		0.00	475.00	712.50	2500.00	3,750.00	5000.00	7,500.00
3.	11,611	CY	Mine Closure		0.00	4.25	49,346.75	4.00	46,444.00	2.24	26,008.64
4.	2	EA	Adit Seal		0.00	350.00	700.00	1000.00	2,000.00	3000.00	6,000.00
5.	4	EA	Mounded Earth Road Barriers (Kelly Humps)		0.00	175.00	700.00	500.00	2,000.00	1000.00	4,000.00
6.	4	AC	Seeding, Fertilizing and Mulching		0.00	795.00	3,180.00	500.00	2,000.00	2500.00	10,000.00
					0.00		57,139.25		59,194.00		59,408.64

HAZARDOUS MINE OPENING MAINTENANCE PROJECT
YORK MINING DISTRICT - PHASE II - LEWIS & CLARK COUNTIES, MONTANA

BID TABULATIONS				ENGINEER'S ESTIMATE		MARQUIS EXCAVATING		CHIEF'S EXCAVATING AND CONTRACTING		DIAMOND CONSTRUCTION	
Item Number	Estimated Quantity	Unit	Description	Unit Price	Total Price						
1.	1	LS	Mobilization, Bonding and Insurance	.00		5977.00	5,977.00	9765.00	9,765.00	5000.00	6,000.00
2.	1.5	AC	Clearing and Grubbing			3000.00	4,500.00	2690.00	4,035.00	5400.00	8,100.00
3.	11,611	CY	Mine Closure			3.20	37,155.20	3.40	39,477.40	4.25	49,346.75
4.	2	EA	Adit Seal			2000.00	4,000.00	625.00	1,250.00	650.00	1,300.00
5.	4	EA	Mounded Earth Road Barriers (Kelly Humps)			734.45	2,937.80	500.00	2,000.00	200.00	800.00
6.	4	AC	Seeding, Fertilizing and Mulching			1300.00	5,200.00	2410.00	9,640.00	1500.00	6,000.00
							59,770.00		66,167.40		70,546.75

DSL/AMRB 94-005
May 25, 1995

BID TABULATIONS				ENGINEER'S ESTIMATE		ENVIRONMENTAL RECLAMATION NORTHWEST		MCDANIEL & SONS CONTRACTORS, INC.		MONTGOMERY CONSTRUCTION	
Item Number	Estimated Quantity	Unit	Description	Unit Price	Total Price						
1.	1	LS	Mobilization, Bonding and Insurance	.00	0.00	6800.00	6,800.00	5222.00	5,222.00	10000.00	10,000.00
2.	1.5	AC	Clearing and Grubbing		0.00	2000.00	3,000.00	6439.00	9,658.50	10500.00	15,750.00
3.	11,611	CY	Mine Closure		0.00	4.75	55,152.25	4.64	53,875.04	3.52	40,870.72
4.	2	EA	Adit Seal		0.00	450.00	900.00	571.00	1,142.00	900.00	1,800.00
5.	4	EA	Mounded Earth Road Barriers (Kelly Humps)		0.00	250.00	1,000.00	48.00	192.00	350.00	1,400.00
6.	4	AC	Seeding, Fertilizing and Mulching		0.00	2200.00	8,800.00	1982.00	7,928.00	2500.00	10,000.00
					0.00		75,652.25		78,017.54		79,820.72

HAZARDOUS MINE OPENING MAINTENANCE PROJECT
YORK MINING DISTRICT - PHASE II - LEWIS & CLARK COUNTIES, MONTANA

BID TABULATIONS				ENGINEER'S ESTIMATE		WESTERN IMPROVEMENT INC.			
Item Number	Estimated Quantity	Unit	Description	Unit Price	Total Price				
1.	1	LS	Mobilization, Bonding and Insurance	.00	0.00	22500.00	0.00	0.00	0.00
2.	1.5	AC	Clearing and Grubbing		0.00	12000.00	.00	0.00	0.00
3.	11,611	CY	Mine Closure		0.00	6.71	0.00	0.00	0.00
4.	2	EA	Adit Seal		0.00	1500.00	.00	0.00	0.00
5.	4	EA	Mounded Earth Road Barriers (Kelly Humps)		0.00	1000.00	0.00	0.00	0.00
6.	4	AC	Seeding, Fertilizing and Mulching		0.00	2200.00	0.00	0.00	0.00
					0.00	134,209.81		0.00	0.00

APPENDIX C

CHANGE ORDERS AND WORK DIRECTIVE CHANGES YORK MINING DISTRICT - PHASE II

CHANGE ORDER

ORDER NO. 1

PROJECT TITLE: York - Phase II

MONT A/E or DEQ-AMRB: 94-007

CONTRACT DATE: June 29, 1995

OWNER: Montana Dept. Of Environmental Quality - AMRB

CONTRACTOR: Scott Construction Co.

Change Orders must be accompanied by an itemized cost breakdown. You are hereby requested to comply with the following changes from the Contract Documents. (Show separate costs for materials, labor, equipment, and miscellaneous. Show percent where applicable.)

ITEM NO.	DESCRIPTION OF CHANGES - ESTIMATED QUANTITIES & UNITS	COST OF CHANGES					TOTAL COST
		MAT'LS.	LABOR	EQUIP.	MISC.	TOTAL UNIT COST	
3.	Mine Closure - Actual vs. Constructed Quantities (2,243 cy)					4.25	\$ <9,532.75>
6.	Seed, Fertilize, and Mulch - Actual vs. Constructed Quantities (1.01 ac.)					795.00	\$ <802.95>
	Allowance for 1% Contractors Tax paid						\$ 507.03
TOTAL COST - MATERIALS, LABOR, EQUIPMENT & MISC.							\$ <9,828.67>
OVERHEAD & PROFIT @ _____%							N/A
GRAND TOTAL - THIS CHANGE ORDER							\$ <9,828.67>

Original Contract Price	<u>\$ 57,139.25</u>
Current Contract Price Adjusted by Previous Change Order	<u>\$ 57,139.25</u>
Cost this Change Order (+ or -)	<u>\$ <9,828.67></u>
New Contract Price including this Change Order	<u>\$ 47,310.58</u>

The completion date as set forth in the Contract Documents shall be (unchanged, increased, decreased) by 0 calendar days.

The date for completion of all work will be N/A.

Description and Justification for Change:

3 & 6. Final reconciliation of estimated versus constructed quantities.

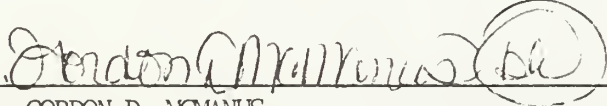
Tax withheld from Pay Request No. 1 (\$507.03) was allowed to be applied toward overpayment.

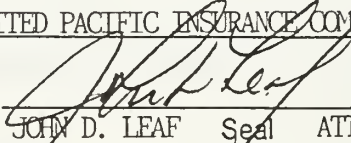
SURETY CONSENT

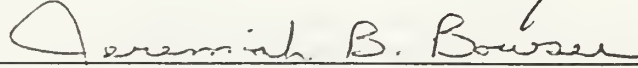
The Surety hereby consents to the aforementioned Contract Change Order and agrees that its bond or bonds shall apply and extend to the Contract as thereby modified or amended per this Change Order. The Principal and the Surety further agree that on or after execution of this consent, the penalty of the applicable Performance Bonds or Bonds is hereby ~~increased~~ by \$ 9,828.67 (100% of the Change Order amount) and the penalty of the applicable Labor and Material Bond or Bonds is hereby ~~increased~~ by \$ 9,828.67 (100% of the Change Order amount).

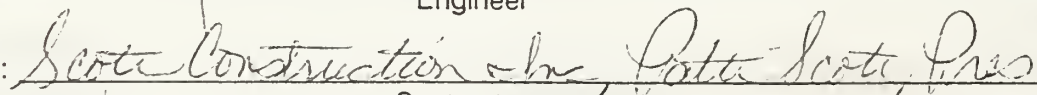
COUNTERSIGNED BY MONTANA
RESIDENT AGENT


SURETY


GORDON D. MCMANUS
FLYNN INSURANCE AGENCY
BOX 711, GREAT FALLS, MT 59403

UNITED PACIFIC INSURANCE COMPANY
By: 
JOHN D. LEAF Seal ATTORNEY-IN-FACT

Recommended by:  4/16/96
Engineer Date

Accepted by:  4-5-96
Contractor Date

Approved by:  4-18-96
Owner Date

APPENDIX D

**APPROVED PAYMENT REQUESTS, CERTIFICATES OF COMPLETION AND
ACCEPTANCE, AND AFFIDAVIT ON BEHALF OF CONTRACTOR
YORK MINING DISTRICT - PHASE II**

PAYMENT REQUEST NO. 1

FROM July 10, 1995 TO August 17, 1995

PROJECT TITLE: York - Phase II

LOCATION: Lewis & Clark County, MT MONT A/E or DSL-AMRB: 94-007

NAME OF CONTRACTOR: Scott Construction, Inc.

ADDRESS: P.O. Box 777, East Helena, MT 59635

SUMMARY OF PROJECT STATUS

Amount of Original Contract

\$ 57,139.25

Change Order No. _____

\$ _____

Change Order No. _____

\$ _____

Change Order No. _____

\$_____

Amount of Approved Change Order(s)

\$ _____

TOTAL CONTRACT AMOUNT

\$ 57,139.25

Pay Request No.	Amount of Request

Total Contract Amount Completed to Date

\$ 56,336.30

Less Retainage (10 %)

\$ 5,633.63

TOTAL AMOUNT EARNED TO DATE

\$ 50,702.67

Less Previous Payments

\$ 0

AMOUNT DUE THIS PAYMENT

\$ 50,702.67

Less 1% Tax

\$ 507.03

TOTAL DUE CONTRACTOR

\$ 50.195.64

I certify that this claim is correct and just in all respects and that payment or credit has not been received.

APPROVED BY:

Scott Construction
Contractor

Dept. of State Lands, Abandoned Mine Reclamation Bureau
Owner

By Robert Scott Fries

By _____

Date 8-15-98

Date _____

RECOMMENDED BY:

Huntingdon Engineering & Environmental, Inc.

Engineer

By Clement B. Benson

Date 1 8/18/95

PAYMENT REQUEST NO. 2

FROM August 18, 1995 TO March 6, 1996

PROJECT TITLE: York - Phase II

LOCATION: Lewis & Clark County, MT MONT A/E or DSL-AMRB: 94-007

NAME OF CONTRACTOR: Scott Construction, Inc.

ADDRESS: P.O. Box 777, East Helena, MT 59635

SUMMARY OF PROJECT STATUS

Amount of Original Contract	\$ <u>57,139.25</u>
Change Order No. <u>1</u> \$ <u><9,828.67></u>	
Change Order No. <u> </u> \$ <u> </u>	
Change Order No. <u> </u> \$ <u> </u>	
Amount of Approved Change Order(s)	\$ <u><9,828.67></u>
TOTAL CONTRACT AMOUNT	\$ <u>47,310.58</u>

Pay Request No.	Amount of Request
1	\$ 50,702.67

Total Contract Amount Completed to Date	\$ <u>47,310.58</u>
Less Retainage (<u>12</u> %)	\$ <u>5,633.63</u>
TOTAL AMOUNT EARNED TO DATE	\$ <u>41,676.95</u>
Less Previous Payments	\$ <u>50,702.67</u>
AMOUNT DUE THIS PAYMENT	\$ <u><9,025.72></u>
Less 1% Tax	\$ <u>N/A</u>
TOTAL DUE CONTRACTOR	\$ <u><3,392.09></u>

I certify that this claim is correct and just in all respects and that payment or credit has not been received.

Scott Construction, Inc.
Contractor

By Patricia Scott, Pres
Date 4-5-96

RECOMMENDED BY:

Maxim Technologies, Inc.
Engineer

By Jeremiah B. Bousen
Date 4/16/96

APPROVED BY:

Dept. of Env. Quality, Abandoned Mine Reclamation Bureau
Owner

By Vic R. Andersen
Date 4-18-96

CERTIFICATE OF SUBSTANTIAL COMPLETION

TO: DEQ - Abandoned Mine Reclamation Bureau OWNER

PROJECT TITLE: HMO Project York Mining District - Phase II

MONT A/E or DEQ-AMRB: 94-005

CONTRACT DATE: 6/29/95

LOCATION: York Mining District

PROJECT OR PART SHALL INCLUDE: _____

CONTRACTOR: Scott Construction

ADDRESS: P.O. Box 777

East Helena, MT 59635

TELEPHONE NO: (406)227-5740

SUBSTANTIAL COMPLETION DATE: 8/18/95

DEQ INSPECTION DATE: 8/18/95

ENGINEER: Jeremiah B. Bowser, P.E.

PERFORMANCE BOND NO: U2577295

DATE OF BOND: June 20, 1995

SURETY: United Pacific Insurance

MONTANA AGENT: Flynn Agency

ADDRESS: P.O. Box 711

Great Falls, MT 59403

The Work performed under this Contract has been inspected by authorized representatives of the Owner, Contractor, and Engineer, and the Project (or specified part of the Project, as indicated above) is hereby declared to be substantially completed on the above date.

DEFINITION OF SUBSTANTIAL COMPLETION

The date of substantial completion of a project or specified area of a project is the date when the construction is sufficiently completed, in accordance with the contract documents, as modified by any change orders agreed to by the parties, so the Owner can occupy or utilize the project or specified area of the project for the use for which it was intended.

A tentative list of items to be completed is appended hereto. This list may not be exhaustive, and the failure to include an item on it does not alter the responsibility of the Contractor to complete all the Work in accordance with the Contract Documents.

ENGINEER:

Huntingdon Engineering & Environmental
By Jeremiah B. Bowser 9/7/95
Authorized Representative Date

The Contractor accepts the above Certificate of Substantial Completion and agrees to complete and correct the items on the tentative list within the time indicated.

CONTRACTOR:

Scott Construction Inc.
By Robert Scott 9-25-95
Authorized Representative Date

The Owner accepts the Project or specified area of the Project as substantially complete and will assume full possession of the project or specified area at _____ (time), on _____ (date). The responsibility for heat, utilities, security, and insurance under the Contract Documents shall be as set forth under "Remarks" below.

OWNER:

Vic R. Andersen
DEPT ENVIRONMENTAL QUALITY
By 10/11/95
Authorized Representative Date

Remarks: (Attach additional sheet, if necessary)

RECEIVED

OCT 04 1995

Rev. 3/91

MAXIM TECHNOLOGIES
HELENA MT

CONTRACTOR'S CERTIFICATE OF COMPLETION

TO (Owner): Abandoned Mine Reclam. Bureau DATE: April 15th, 1996
Dept. of Envir. Quality PROJECT TITLE: York - Phase II
1625 11th Ave
Helena, MT 59601 MONT A/E or DSL-AMRB: 94-007
ATTN: Engineer Jerry Bowser CONTRACT DATE: June 15th, 1995
FROM: Maxim Technology
(Firm or Corporation)

This is to certify that I, Patti Scott, am an authorized official of
SCOTT CONSTRUCTION, INC., working in the capacity of
PRESIDENT and have been properly authorized by said firm or corporation to
sign the following statements pertaining to the subject contract:

I know of my own personal knowledge, and do hereby certify, that the work of the contract described above has been performed, and materials used and installed in every particular, in accordance with, and in conformity to, the Contract Plans and Specifications.

The contract work is now complete in all parts and requirements and ready for your substantial completion inspection.

I understand that neither the determination of the Engineer that the work is complete nor the acceptance thereof by the Owner shall operate as a bar to claim against the Contractor under the terms of the guarantee provisions of the Contract Documents.

CONTRACTOR: SCOTT CONSTRUCTION, INC

By: Patti Scott
President Title

Distribution: 1. Project Manager
2. Field Office
3. File

RECEIVED

APR 16 1996

MAXIM TECHNOLOGIES
HELENA, MT

AFFIDAVIT ON BEHALF OF CONTRACTOR

STATE OF MONTANA)
 : ss
COUNTY OF LEWIS & CLARK)

MONT A/E or DSL-AMRB: 94-007

DATE: April 15th, 1996

I certify to the best of my knowledge and belief that all work has been performed and materials supplied in strict conformance with the terms and conditions of the corresponding contract documents between Dept. of Env. Quality/Abond.Mine the Owner, and Scott Construction, Inc., the Contractor, dated June 15th, 1995 for the York Phase II

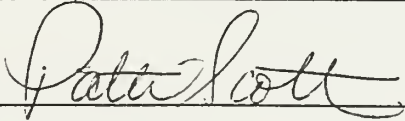
Project, Mont A/E or DSL-AMRB 94-007, and further declare that all bills for materials, supplies, utilities, and for all other things furnished or caused to be furnished by the above-named Contractor and used in the execution of the above Contract have been fully paid, and there are no unpaid claims or demands of State Agencies, subcontractors, materialmen, mechanics, laborers or any others resulting from or arising out of work done or ordered to be done by said Contractor under the above-identified Contract.

In consideration of the prior and final payments made and all payments made for authorized changes, the Contractor releases and forever discharges the Owner from any and all obligations and liabilities arising by virtue of said Contract and authorized changes between the parties hereto, either verbal or in writing, and any and all claims and demands of every kind and character whatsoever against the Owner, arising out of or in any way relating to said Contract, and authorized changes.

This statement is made for the purpose of inducing the Owner to make Final Payment under the terms of the Contract, relying on the truth and statements contained therein.

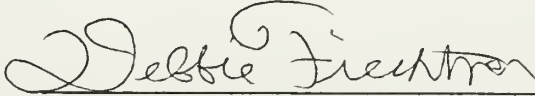
Dated this 15th day of April, 1996, at East Helena, Montana.

CONTRACTOR: SCOTT CONSTRUCTION, INC.

By: 
Title: President

Subscribed and sworn to before me this 15th day of April, 1996.

(SEAL)


Notary Public for the State of Montana
Residing at Helena, MT
My commission expires 3/25/2000

APPENDIX E

**PROJECT RECONCILIATION
YORK MINING DISTRICT – PHASE II**

TABLE 6-1
Project Reconciliation
York Phase II

Site No.	Mine Opening No.	Specified Task	Area Disturbed/Seeded	Estimated Quantity	Constructed Quantity	Total Cost (Backfill)
1	P-1	Shaft Closure	1,224 SF	66 CY	66 CY	\$ 280.50
4	A-1	Adit Closure	100 SF	2 CY	2 CY	\$ 8.50
12	P-1	Shaft Closure	429 SF	12 CY	12 CY	\$ 51.00
16a	S-1	Shaft Closure	1,722 SF	32 CY	32 CY	\$ 136.00
	A-1	Adit Closure		5 CY	5 CY	\$ 21.25
22	A-1	Adit Closure	3,808 SF	5 CY	5 CY	\$ 21.25
	P-2	Adit Closure		111 CY	111 CY	\$ 471.75
	T-1	Adit Closure		75 CY	15 CY	\$ 318.75
	T-2	Adit Closure		10 CY	1 CY	\$ 42.50
	P-1	Shaft Closure		13 CY	13 CY	\$ 55.25
	P-2	Shaft Closure		16 CY	18 CY	\$ 68.00
26	A-1	Adit Closure	510 SF	3 CY	9 CY	\$ 38.25
29	A-1	Shaft Closure	832 SF	36 CY	36 CY	\$ 153.00
	P-2	Shaft Closure		45 CY	45 CY	\$ 191.25
30	P-1	Shaft Closure	2,520 SF	310 CY	310 CY	\$ 1,317.50
31	P-1	Shaft Closure	4,504 SF	18 CY	15 CY	\$ 63.75
	P-2	Shaft Closure		225 CY	225 CY	\$ 956.25
	P-3	Shaft Closure		18 CY	11 CY	\$ 187.00
	P-4	Shaft Closure		20 CY	20 CY	\$ 85.00
	P-5	Shaft Closure		18 CY	1 CY	\$ 76.50
36	P-1	Shaft Closure	2,712 SF	5 CY	5 CY	\$ 21.25
	P-2	Shaft Closure		3 CY	9 CY	\$ 12.75
	A-3	Shaft Closure		28 CY	28 CY	\$ 119.00
	P-4	Shaft Closure		22 CY	22 CY	\$ 93.50
	T-1	Adit Closure		33 CY	33 CY	\$ 140.25
	T-2	Adit Closure		18 CY	18 CY	\$ 76.50
37	P-2	Adit Closure	6,479 SF	4 CY	4 CY	\$ 17.00
	A-3	Adit Closure		10 CY	11 CY	\$ 46.75
	T-1	Adit Closure		222 CY	222 CY	\$ 943.50
	A-4	Adit Closure		5 CY	5 CY	\$ 21.25
	A-6	Adit Closure		13 CY	13 CY	\$ 55.25

TABLE 6-1
Project Reconciliation
York Phase II

Site No.	Mine Opening No.	Specified Task	Area Disturbed/Seeded	Estimated Quantity	Constructed Quantity	Total Cost (Backfill)
40	A-8	Adit Closure	1,596 SF	64 CY	64 CY	\$ 272.00
	A-9	Adit Closure		4 CY	7 CY	\$ 29.75
	P-14	Shaft Closure		15 CY	15 CY	\$ 63.75
44	P-1	Shaft Closure	2,801 SF	22 CY	20 CY	\$ 85.00
	A-8	Shaft Closure		33 CY	33 CY	\$ 140.25
	P-3	Shaft Closure		2 CY	2 CY	\$ 8.50
	P-4	Shaft Closure		5 CY	5 CY	\$ 21.25
	P-5	Shaft Closure		17 CY	18 CY	\$ 76.50
	P-6	Shaft Closure		35 CY	35 CY	\$ 148.75
48	P-1	Shaft Closure	980 SF	35 CY	35 CY	\$ 148.75
49	P-1	Shaft Closure	910 SF	79 CY	83 CY	\$ 352.75
	P-2	Shaft Closure		8 CY	8 CY	\$ 17.00
50	S-1	Shaft Closure	2,580 SF	178 CY	178 CY	\$ 756.50
51	A-1	Shaft Closure	702 SF	8 CY	8 CY	\$ 34.00
	P-2	Shaft Closure		79 CY	40 CY	\$ 170.00
52a	P-1	Shaft Closure	1,144 SF	36 CY	35 CY	\$ 153.00
53	P-1	Shaft Closure	2,125 SF	22 CY	22 CY	\$ 93.50
	P-2	Shaft Closure		4 CY	4 CY	\$ 17.00
	P-3	Shaft Closure		17 CY	17 CY	\$ 72.25
54	P-1	Shaft Closure	1,050 SF	22 CY	22 CY	\$ 93.50
60	A-1	Adit Closure	980 SF	64 CY	64 CY	\$ 272.00
56	P-1	Shaft Closure	1,418 SF	79 CY	49 CY	\$ 335.75
57	A-1	Adit Closure	1,100 SF	33 CY	33 CY	\$ 140.25
59a	P-1	Shaft Closure	960 SF	17 CY	17 CY	\$ 72.25
60	S-1	Shaft Closure	1,440 SF	165 CY	165 CY	\$ 701.25
60a	P-1	Shaft Closure	1,050 SF	22 CY	22 CY	\$ 93.50
60b	P-1	Shaft Closure	1,176 SF	53 CY	53 CY	\$ 225.25
	P-2	Shaft Closure		32 CY	32 CY	\$ 136.00
61a	P-2	Shaft Closure	510 SF	4 CY	4 CY	\$ 17.00
61b	P-1	Shaft Closure	240 SF	4 CY	4 CY	\$ 17.00
61c	P-1	Shaft Closure	370 SF	4 CY	4 CY	\$ 17.00

TABLE 6-1
Project Reconciliation
York Phase II

Site No.	Mine Opening No.	Specified Task	Area Disturbed/Seeded	Estimated Quantity	Constructed Quantity	Total Cost (Backfill)
62a	S-1	Shaft Closure	1,998 SF	370 CY	370 CY	\$ 1,572.50
62c	P-1	Shaft Closure	1,008 SF	4 CY	4 CY	\$ 17.00
63	P-1	Shaft Closure	264 SF	7 CY	7 CY	\$ 29.75
64	A-1	Adit Closure	240 SF	10 CY	10 CY	\$ 42.50
66	A-1	Adit Closure	976 SF	42 CY	42 CY	\$ 178.50
68	P-1	Shaft Closure	864 SF	6 CY	6 CY	\$ 25.50
69	P-1	Shaft Closure	561 SF	4 CY	4 CY	\$ 17.00
70	A-1	Shaft Closure	51 SF	2 CY	2 CY	\$ 8.50
71	A-1	Adit Closure	648 SF	12 CY	12 CY	\$ 51.00
74	A-1	Adit Closure	3,523 SF	16 CY	16 CY	\$ 68.00
	A-2	Adit Closure		9 CY	9 CY	\$ 38.25
	A-3	Adit Closure		280 CY	280 CY	\$ 1,190.00
	A-4	Adit Closure		58 CY	58 CY	\$ 246.50
80	A-1	Adit Closure	789 SF	15 CY	15 CY	\$ 63.75
	A-2	Adit Closure		8 CY	8 CY	\$ 34.00
100	P-1	Shaft Closure	1,280 SF	5 CY	5 CY	\$ 21.25
	A-2	Shaft Closure		15 CY	15 CY	\$ 63.75
Brown's Gulch Area	1 thru 10	Shaft Closure	70,515 SF	8,190 CY	5,947 CY	\$ 25,274.75
Total Backfill				11,611 CY	9,368 CY	\$ 39,814.00
Total Disturbed/Seeded Area			130,244 SF	4 AC	2.99 AC	\$ 2,377.05
Brown's Gulch	11	Adit Seal	Included	1 EA	1 EA	\$ 350.00
	12	Adit Seal	Included	1 EA	1 EA	\$ 350.00
Area Wide		Kelly Humps	Included	4 EA	4 EA	\$ 700.00
		Clearing & Grubbing	Included	1.5 AC	1.5 AC	\$ 712.50
		Mobilization	N/A	1 LS	1 LS	\$ 2,500.00
		Tax Allowance	N/A	N/A	N/A	\$ 507.03
PROJECT TOTAL						\$ 47,310.58

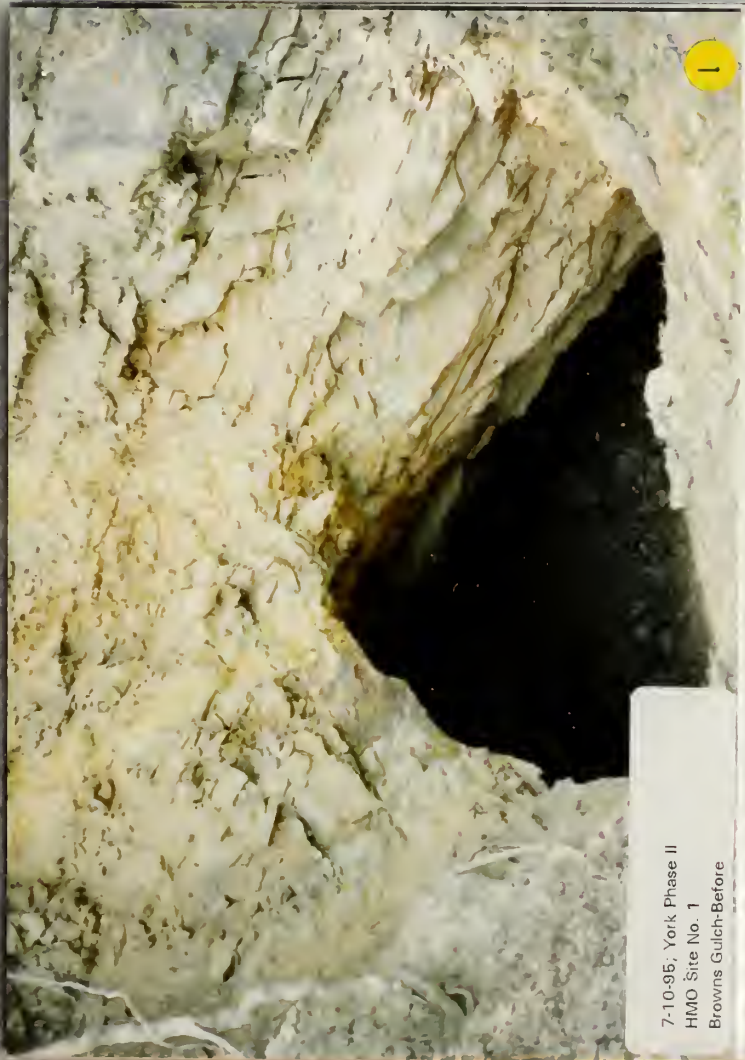
APPENDIX F

PHOTOGRAPHIC RECORD YORK MINING DISTRICT – PHASE II

YORK PHASE II

PHOTO LOG SUMMARY

PHOTO NO.	HMO SITE
1	Browns Gulch No. 1 - Before Backfill
2	Browns Gulch No. 1 - After Backfill
3	Browns Gulch No. 2, 3, and 4 - During Backfill
4	Browns Gulch No. 2 and 3 - After Backfill
5	Browns Gulch No. 3 - Before Backfill
6	Browns Gulch No. 3 - During Backfill
7	Browns Gulch No. 4 - Before Backfill
8	Browns Gulch No. 6 - After Backfill
9	Browns Gulch No. 7 - After Backfill
10	Browns Gulch No. 9 - After Backfill
11	Browns Gulch No. 10 - During Backfill
12	Browns Gulch No. 11 - During Backfill
13	Browns Gulch No. 11 - After Backfill
14	Browns Gulch No. 12 - After Backfill
15	Browns Gulch No. 13 and 14 - After Backfill
16	No. 1, P-1 - After Backfill
17	No. 1, Kelly Hump - After Excavation
18	No. 10, Kelly Hump - After Excavation
19	No. 16A, S-2 - Before Backfill
20	No. 16A, S-2 - After Backfill
21	No. 22, A-2 - Before Backfill
22	No. 29, P-1 - Before Backfill
23	No. 30, P-1 - Before Backfill
24	No. 37, A-6 - After Backfill
25	No. 44, P-1 through P-6 - After Backfill
26	No. 50, S-1 - After Backfill
27	No. 51, A-1 - Before Backfill
28	No. 52a, A-1 - Before Backfill
29	No. 55, A-1 - After Backfill
30	No. 56, P-1 - After Backfill
31	No. 61a, P-2 - After Backfill
32	No. 61c, P-1 - After Backfill
33	No. 64, A-1 - After Backfill
34	No. 66, A-1 - After Backfill
35	No. 69, P-1 - After Backfill
36	No. 74, A-2 and A-4 - After Backfill
37	No. Kelly Hump - After Excavation
38	No. 80, A-1 - After Backfill



7-10-95; York Phase II
HMO Site No. 1
Browns Gulch-Before

1



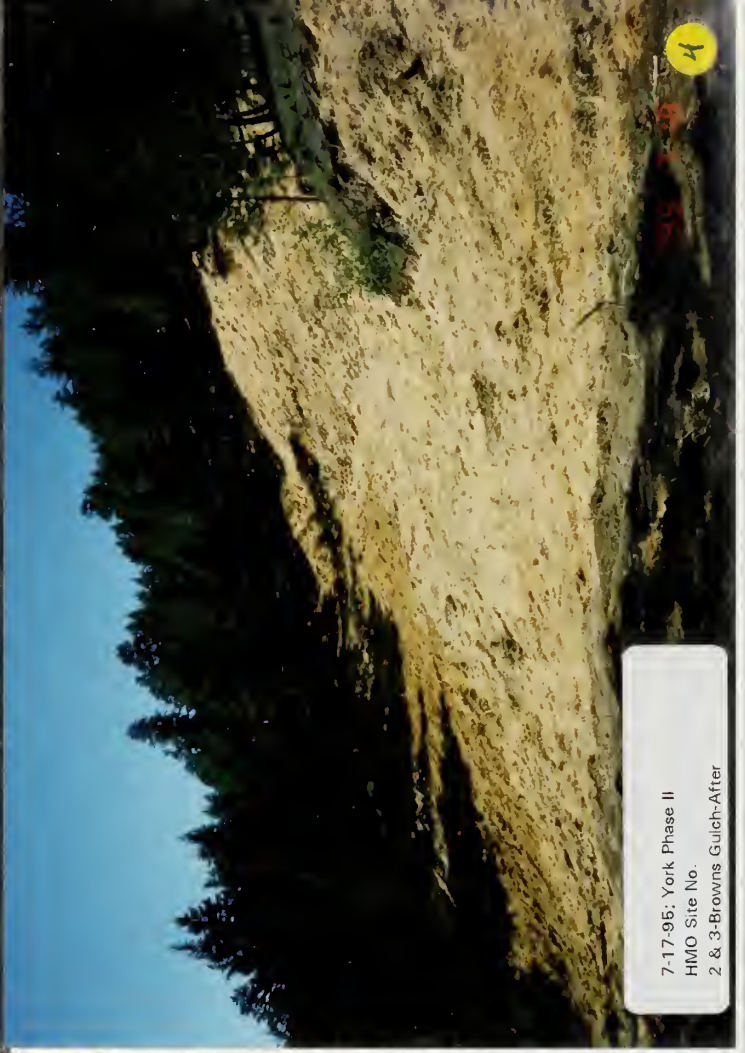
7-17-95; York Phase II
HMO Site No. 1
Browns Gulch - After

2



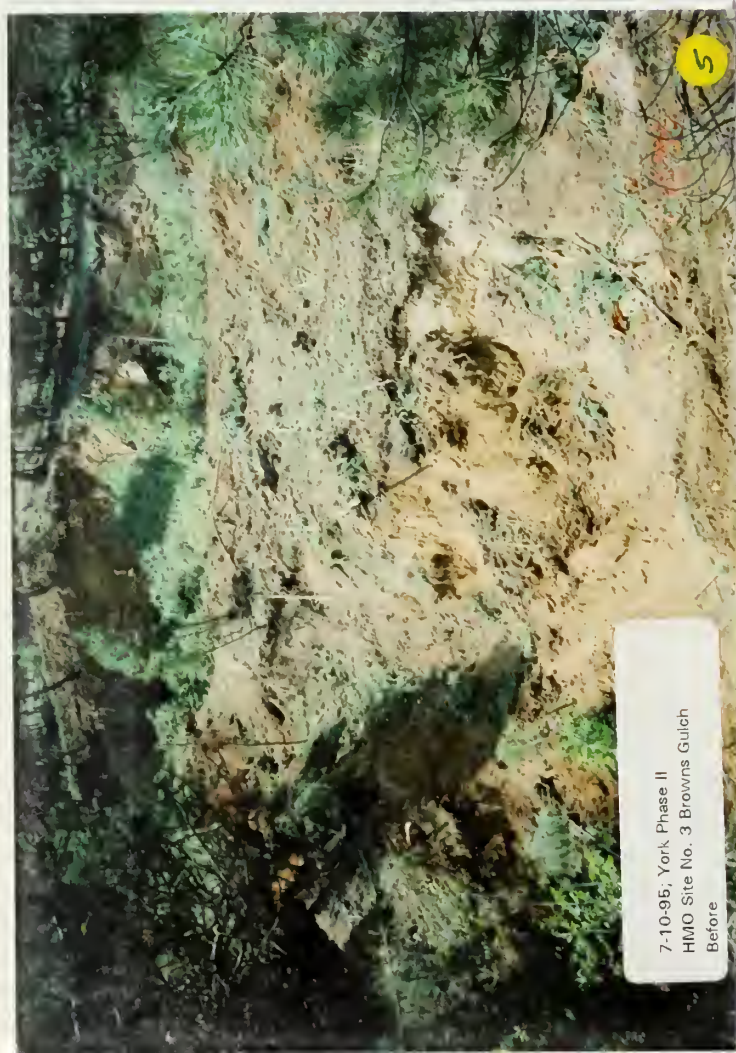
7-11-95; York Phase II
HMO Site No. 2, 3, & 4-
Browns Gulch-During

3



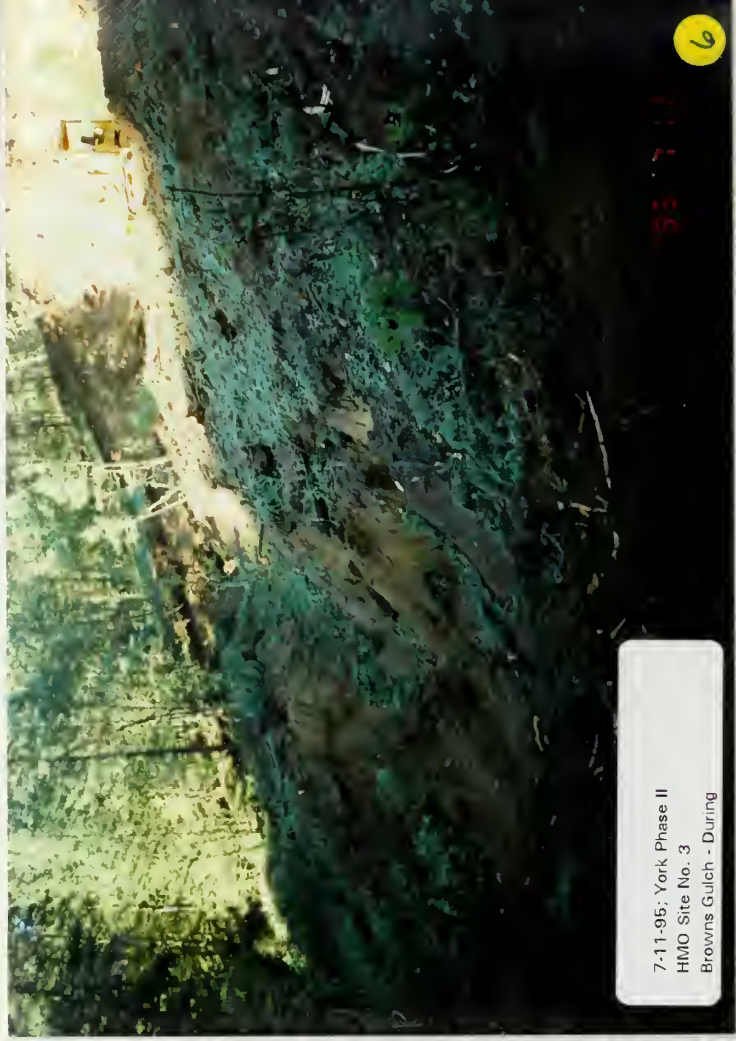
7-17-95; York Phase II
HMO Site No.
2 & 3-Browns Gulch-After

4



7-10-95; York Phase II
HMO Site No. 3 Browns Gulch
Before

5



7-11-95; York Phase II
HMO Site No. 3
Browns Gulch - During

6



7-10-95; York Phase II
HMO Site No. 4
Browns Gulch - Before

7



7-15-95; York Phase II
HMO Site No. 6
Browns Gulch - After

8



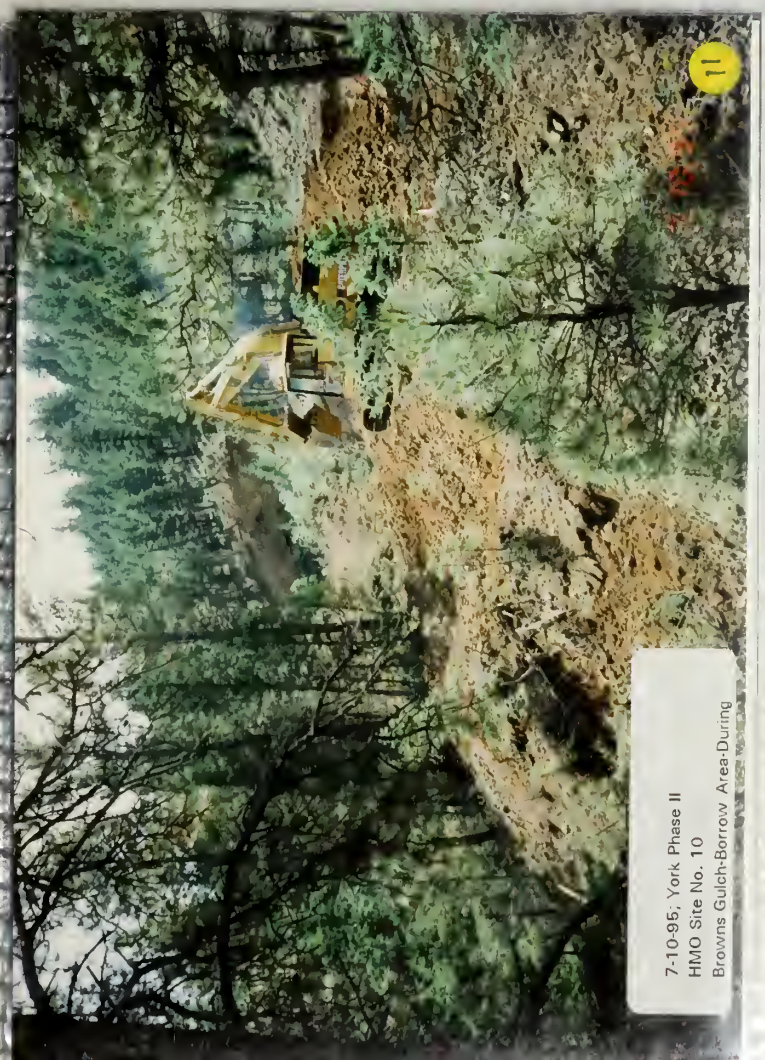
7-15-95; York Phase II
HMO Site No. 7
Browns Gulch - After

33 7-15 9



7-15-95; York Phase II
HMO Site No. 9
Browns Gulch - After

33 7-15 10



7-10-95; York Phase II
HMO Site No. 10
Browns Gulch-Borrow Area-During

33 7-10 11



7-14-95; York Phase II
HMO Site No. 11
Browns Gulch - During

33 7-14 12



7-15-95; York Phase II
HMO Site No. 11
Browns Gulch - After

13



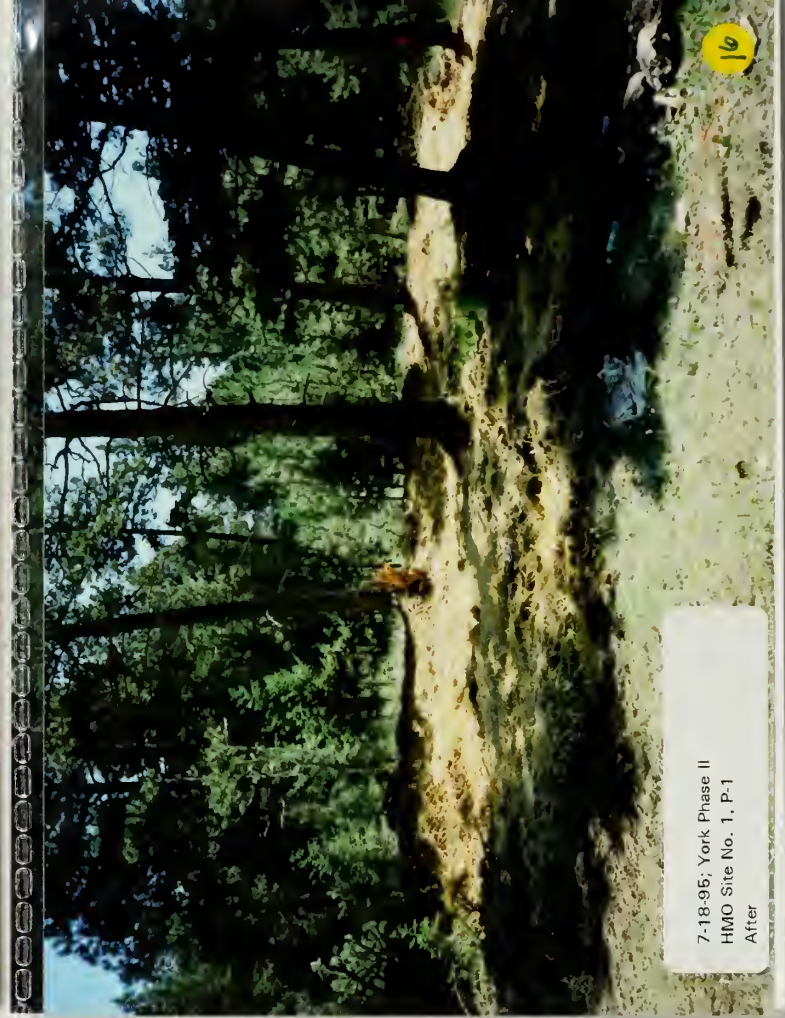
7-14-95; York Phase II
HMO Site No. 12
Browns Gulch - After

14



7-17-95; York Phase II
HMO Site No. 13 & 14
After

15

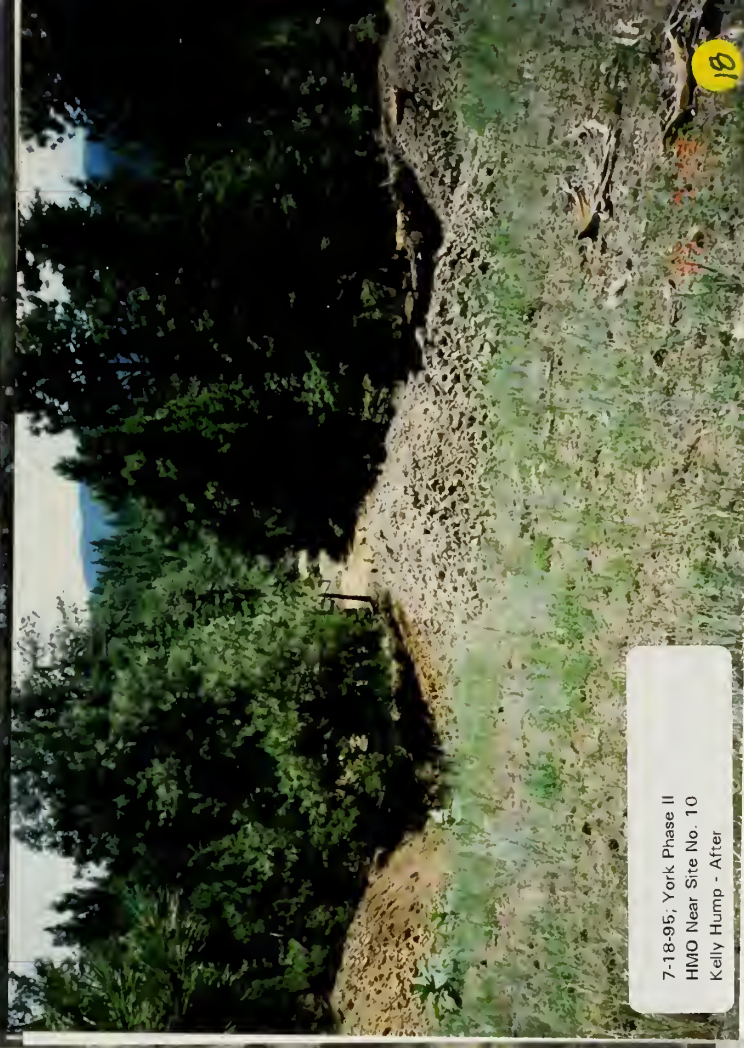


7-18-95; York Phase II
HMO Site No. 1, P-1
After

16



7-18-95; York Phase II
HMO Site No. 1,
Kelly Hump - After



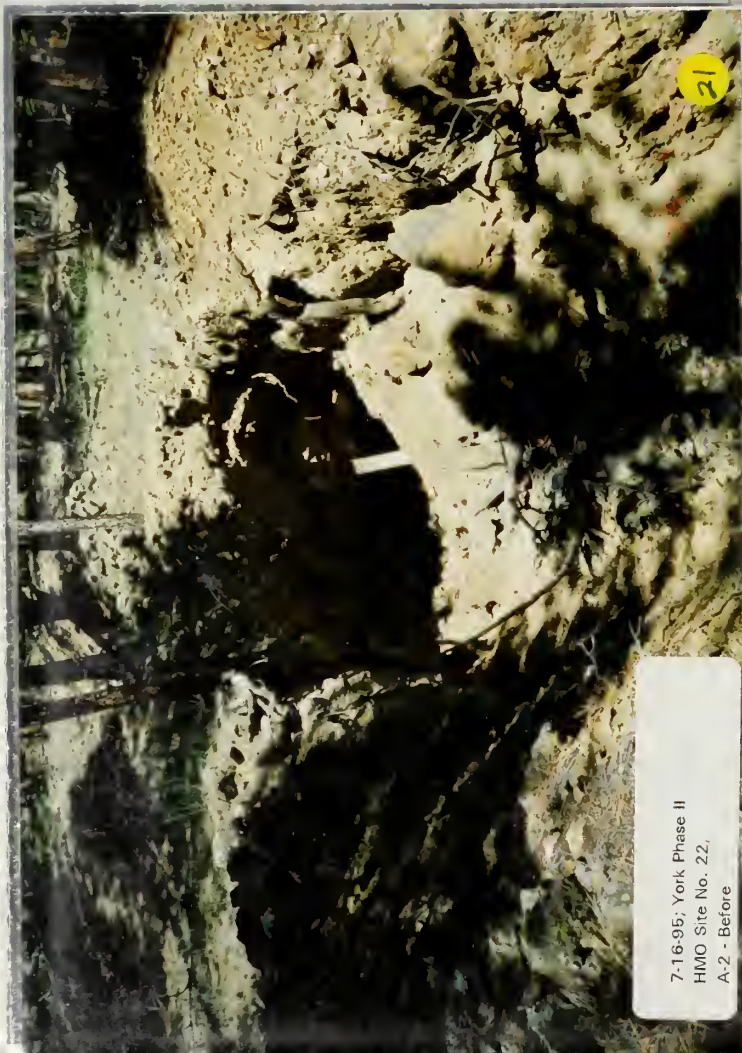
7-18-95; York Phase II
HMO Near Site No. 10
Kelly Hump - After



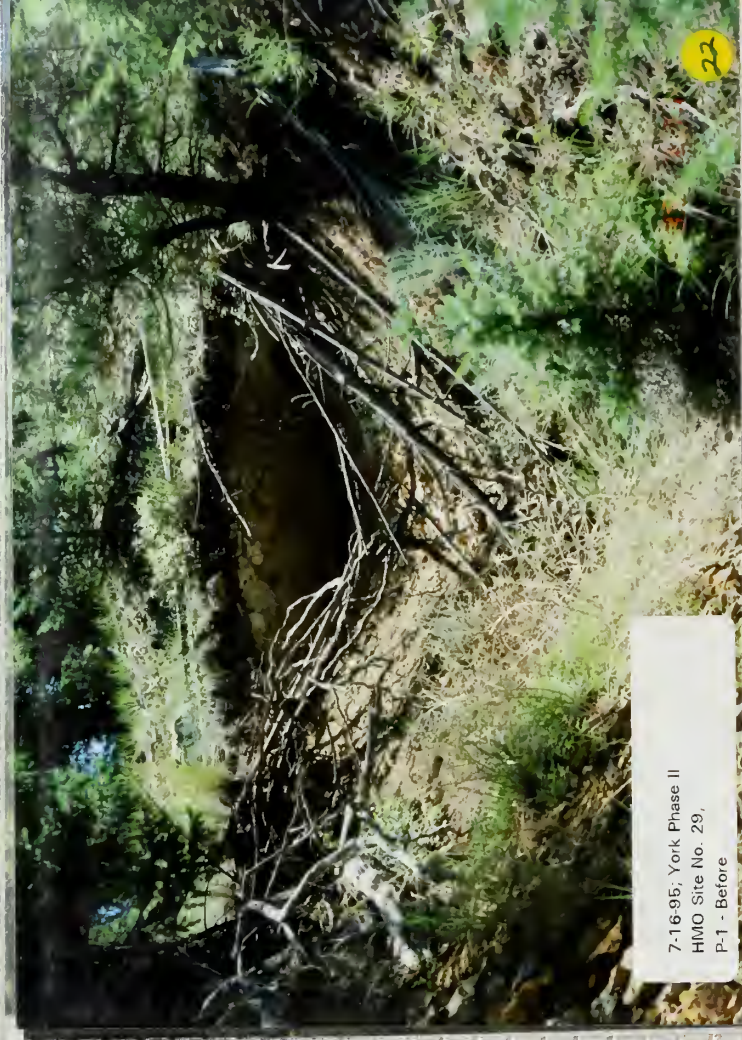
7-18-95; York Phase II
HMO Site No. 16A,
S-2 Before



7-18-95; York Phase II
HMO Site No. 16A,
S-2 - After



7-16-95; York Phase II
HMO Site No. 22,
A-2 - Before



7-16-95; York Phase II
HMO Site No. 29,
P-1 - Before



7-16-95; York Phase II
HMO Site No. 30,
P-1 - Before

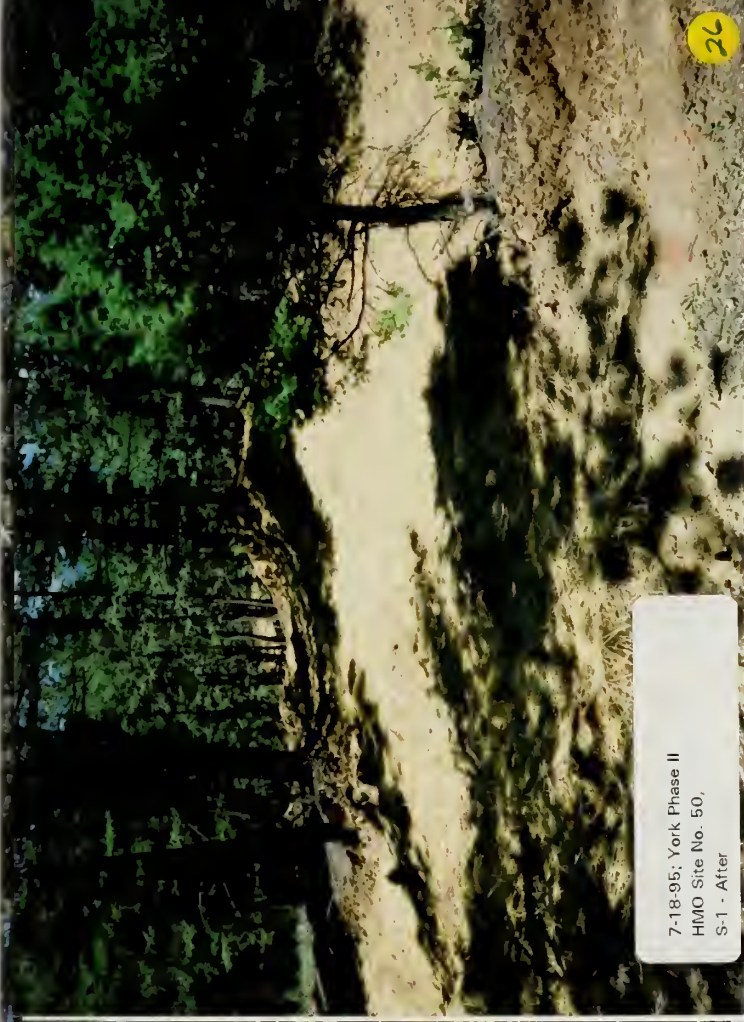


7-16-95; York Phase II
HMO Site No. 37,
A-6 - After



7-18-95; York Phase II
HMO Site No. 44,
P.1 through P.6 After

25



7-18-95; York Phase II
HMO Site No. 50,
S-1 - After

26



7-17-95; York Phase II
HMO Site No. 51, A-1
Before

27



7-17-95; York Phase II
HMO Site No. 52a, A-1 *Before*

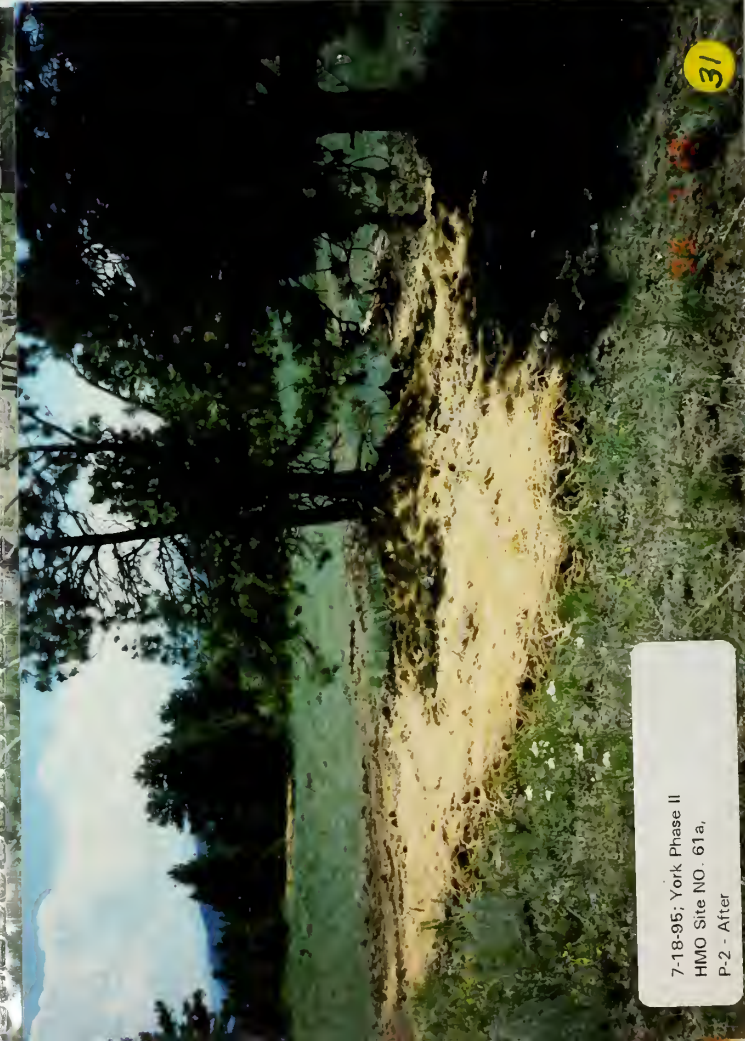
28



7-18-95; York Phase II
HMO Site No. 55,
A-1 - After



7-18-95; York Phase II
HMO Site No. 56,
P-1 - After



7-18-95; York Phase II
HMO Site NO. 61a,
P-2 - After



7-18-95; York Phase II
HMO Site No. 61c,
P-1 - After



7-18-95; York Phase II
HMO Site No. 64,
A-1 - After

33

95 7 13



7-18-95; York Phase II
HMO Site No. 66,
A-1 - After

34

95 7 13



7-18-95; York Phase II
HMO Site No. 69,
P-1 - After

35

95 7 13



7-18-95; York Phase II
HMO Site No. 74,
A-2 & A-4 - After

36

95 7 13

SEATTLE FILMWORKS

PRINT 11 ROLL 80451581 26 JUL 95

10



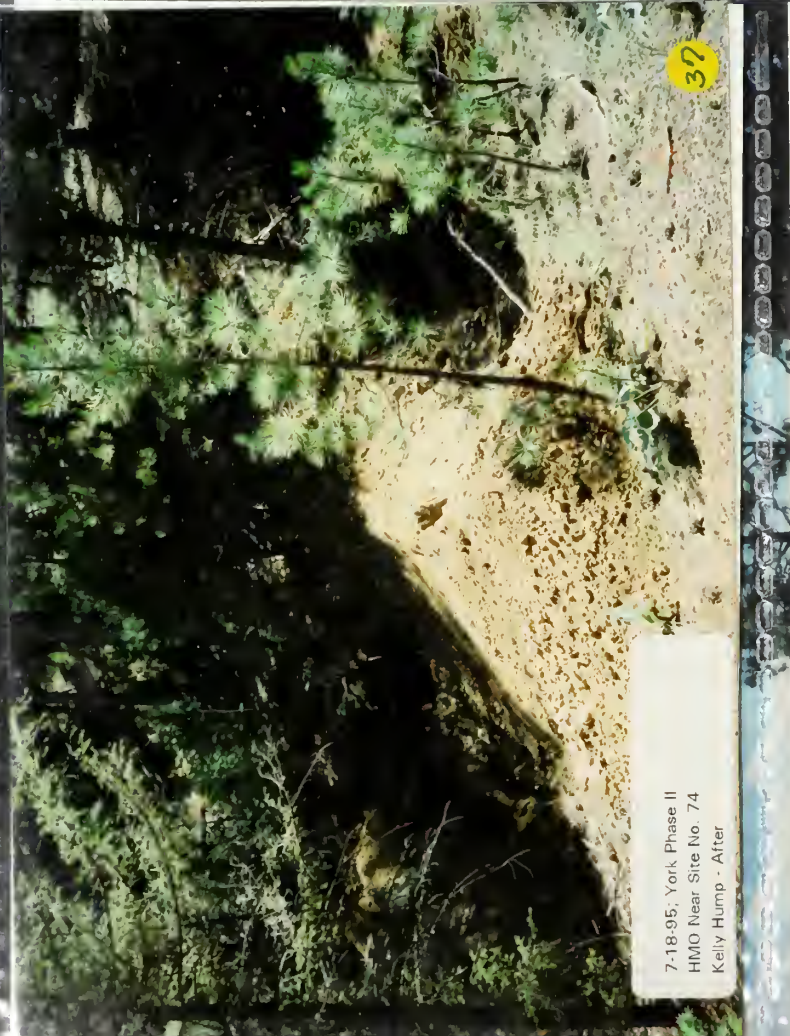
7-18-95; York Phase II
HMO Site No. 80,
A-1 - After

38

SEATTLE FILMWORKS

PRINT 10 ROLL 80451581 26 JUL 95

9



7-18-95; York Phase II
HMO Near Site No. 74
Kelly Hump - After

39

